AEDC Operations, Maintenance, and Management

Risk Assessment

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AEDC/PKP
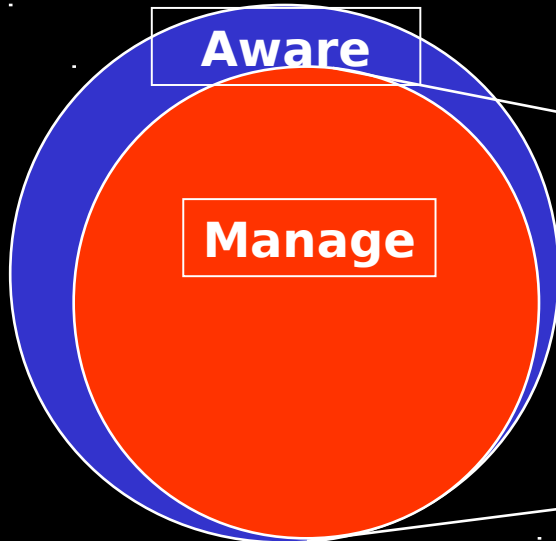
Topics:

- Why Do a Risk Assessment?

- How Will It Be Used?

- How Was It Accomplished?
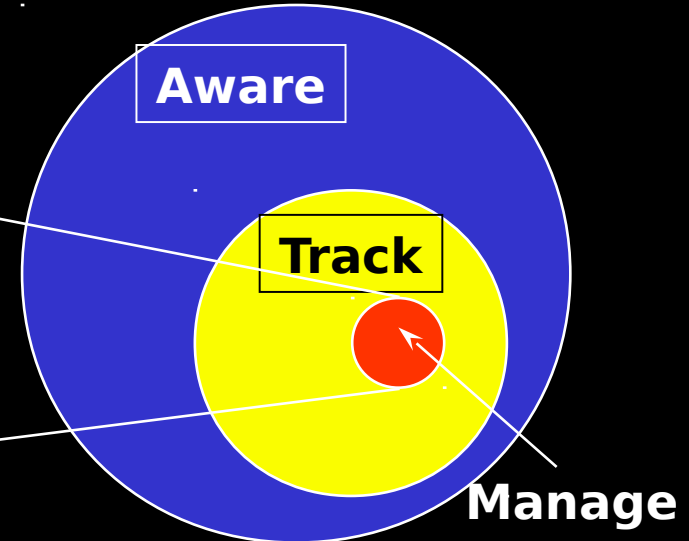
- What Were The Results?

- What's Next?

Why?

There's a Shift in Focus

Where we've been:

Aware

Manage

Focus work effort on key areas

Where we're going:

Aware

Track

Manage

What Is A Risk?

- Risk can be defined as: the inability to meet a program requirement - technical, cost, or schedule
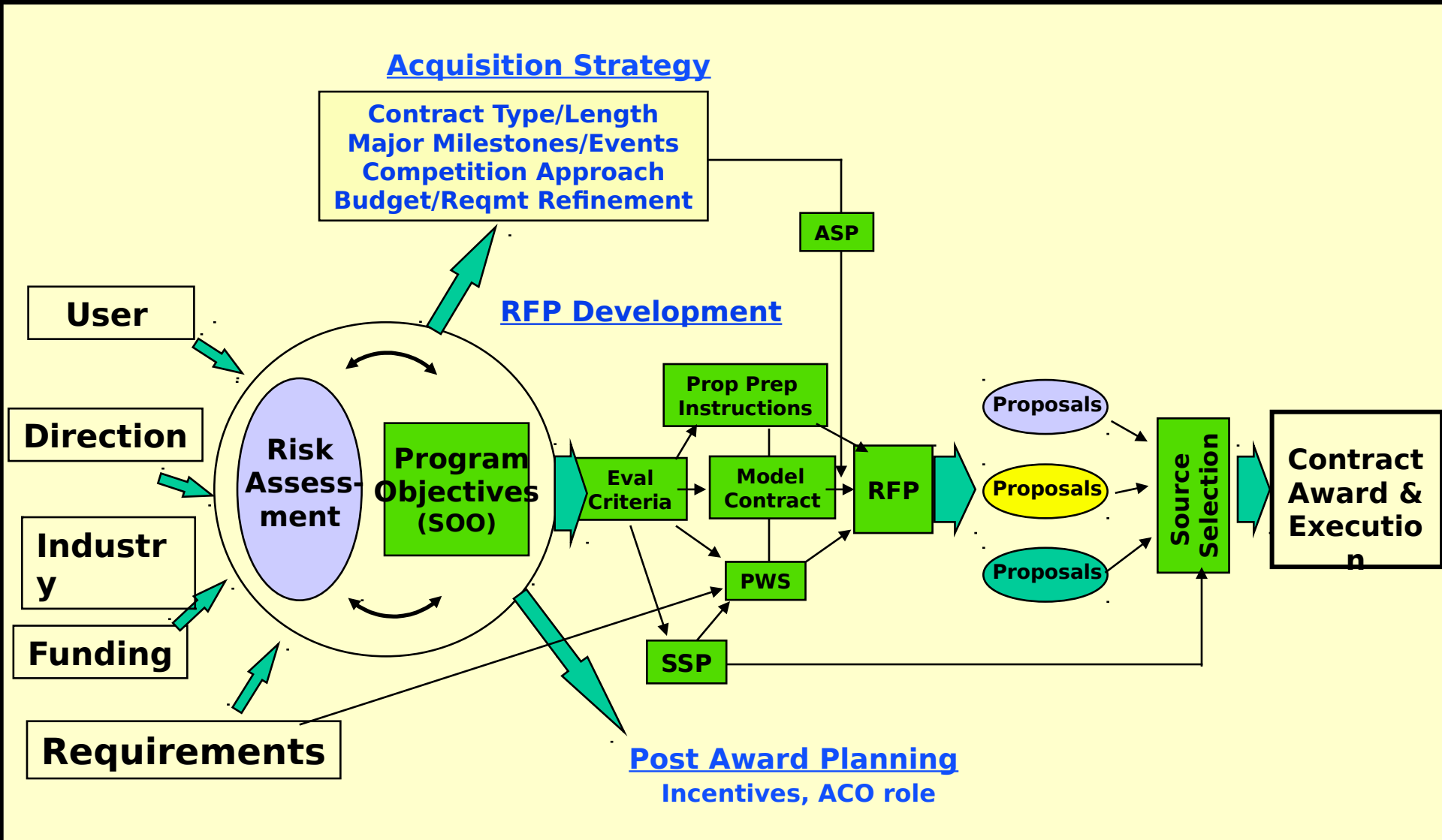
Or

- The **likelihood** of an unwanted event occurring in **combination** with significance of the **consequence** of that occurrence

$$Risk = Likelihood + Consequence$$

$$Risk = Current\ State\ of\ AEDC$$
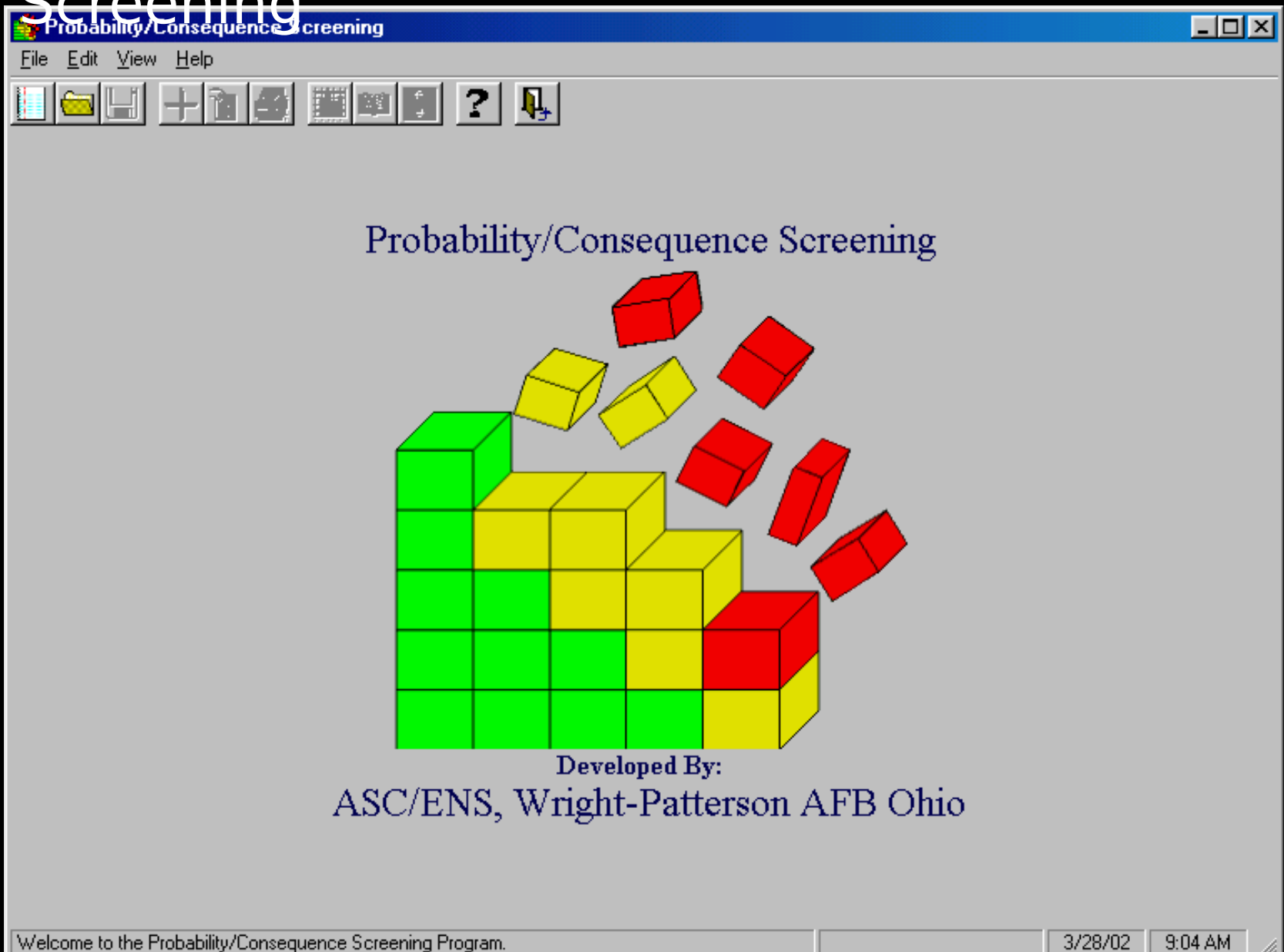
How Will It Be Used?
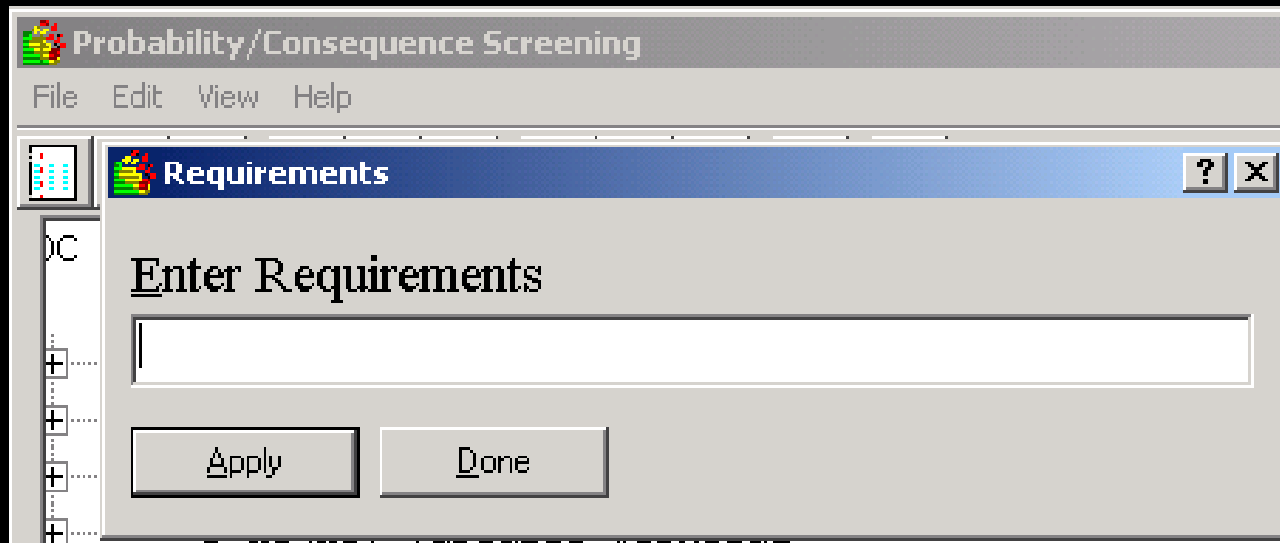
Risk Management Process Model

How Was It Accomplished?

The Tool: Probability/Consequence Screening

The Process: Step 1, Brainstorm Requirements

Requirements Identified:

1. Plan and Conduct Integrated Tests

2. Operate AEDC Assets

3. Maintain AEDC Assets

4. Work Force Management

5. Modernize AEDC Assets

6. Long Range Planning – Govt Responsibility

7. Perform Analysis and Evaluation

8. Contract Management

9. Financial Management

10. Market – Govt Responsibility

Requirements Identified:

11. Support External Reporting

12. Environmental, Safety, Health, and Quality

13. Physical and Information Security

14. Property Accountability

15. Develop Good Public/Private Partnerships – Govt Responsibility

16. Improve Efficiency/Productivity

17. Significantly Reduce Costs

18. Measure Performance

19. Manage Energy – Special Attention to Scheduling

Requirements Identified:

20. Sustain Un-compromised Customer Trust

21. Achieve Customer Intimacy
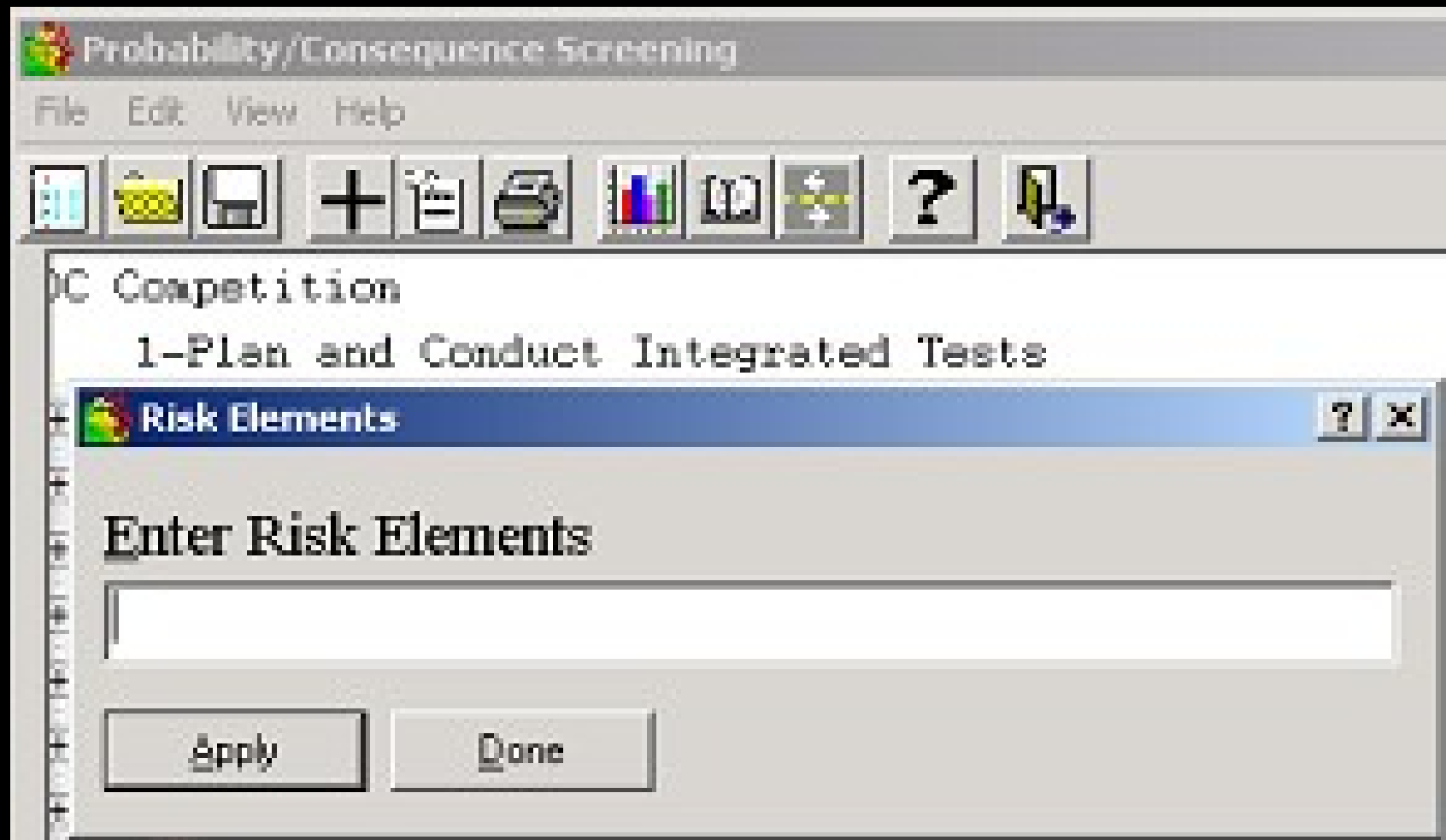
22. Seamless Compliant MIS Integration/O&M

23. Advance State of the Art in Test and Analysis

24. Implement Enterprise Process Management System (Contractor Must Feed Govt System)

25. Public Affairs

26. Integrate All of the Above

The Process: Step 2, Identify Risk Elements for Each Requirement

Probability/Consequence Screening

File   Edit   View   Help

DC Competition

   1-Plan and Conduct Integrated Tests

- A-Insufficient Technical Know How
- B-No Customers for a Specific Test Complex
- C-Too Many Customers
- D-Highly Variable Workload
- E-Damage to Facilities
- F-Facility Not Available
- G-Costs Too High
- H-Energy Costs Too High
- I-Not Capturing Important Information from Tests
- J-Unmanageable Environmental Constraints
- K-Unmanageable ITAR Constraints
- L-Changing Requirements
- M-Damage to Propulsion Test Articles
- N-Security Constraints
- O-Damage to Space and Missiles Test Articles
- P-Damage to Aircraft Test Articles

The Process: Step 3, Assess Probability and Consequences of Each Risk Element

PROBABILITY

Level	Interpretation
1	VERY UNLIKELY TO OCCUR
2	UNLIKELY TO OCCUR
3	MAY OCCUR ABOUT HALF OF THE TIME
4	LIKELY TO OCCUR
5	VERY LIKELY TO OCCUR

CONSEQUENCE LEVELS

- **Negligible**
  - **- An event that would have NO EFFECT on the program**

- **Minor**
  - **- Event that would cause a SMALL cost or schedule increase**
  - **- Requirements would STILL be achieved**

- **Moderate**
  - **- Event that would cause a MODERATE cost and schedule increase**
  - **- Requirement would STILL be achieved**

- **Serious**
  - **- Event that would cause a MAJOR cost and schedule increase**
  - **- Secondary requirements MAY NOT be achieved**

- **Critical**
  - **- Event that would cause program FAILURE**
  - **- Program would fail to meet minimum**

What Were The Results

Risk Matrix

AEDC Competition-Consequence Screening Matrix

4/12/02

	NEGLIGIBLE	MINOR	MODERATE	SERIOUS	CRITICAL
Level 5: 91 - 100%		C1D, S1H, C1H, P1L, P1N, P18B	P2N, P2P, P3N, P6C, P6D, P9D, P17A, P17D, P17I, P22D	P2G, P9G, P17C, P17J, P24A	P17B, P17F
Level 4: 61 - 90%		C1R, S1S, P2E, P3E	C1S, P2L, P3L, P4I, P5E, P9B, P9E, P10D, P12B, P16B, P16C	P5B, P5D, P5G, P5I, P6A, P7B, P22B, P22C	P17E, P22A
Level 3: 41 - 60%		P10A	P2B, P2I, P2O, P3B, P3I, P4C, P4E, P4F, P5H, P8C, P18D	P2A, P2J, P2M, P3A, P3G, P3J, P3M, P4B, P4D, P4G, P5A, P5C	P2H, P17H
Level 2: 11 - 40%		P1B, P11A, P11C, P14A, P14B, P19B, P19C, P23C, P23E	P1M, P1Y, P3O, P5K, P8D, P9A, P11B, P12A, P12C, P16A	P2F, P3C, P3F, P5F, P12D, P26A, P26C	P1A, P1K, P20A
Level 1: 0 - 10%		P1P, S1Q, P1W, P2D, P4H, P10B, P10C	S1C, P1U, P3D, P3P, P4A, P8B, P13C, P19A, P25A	P1E, S1F, P1I, P1J, P1O, P1T, P1V, S1X, P2C, P2K, P2O, P3K	P3H, P20B

Low Risk   **Moderate Risk**   **High Risk**

Next Steps:

- Analysis

- Validation

- Mitigation

Requirements With **High Risks**

1. Plan and Conduct Integrated Tests

- 1a. Insufficient technical knowledge – level 2, serious
  - **Mitigation strategy**:
    - Evaluate plan for capturing existing knowledge and maintaining in future – staffing plan
    - Possible evaluation factor
    - Past performance record
- 1g. Costs Grow or Reductions Don't Happen – level 5,serious
  - **Mitigation strategy:**
    - Plan for achieving significant cost reductions
    - Translate cost reductions into price reductions
    - Past performance record in delivering cost reductions

Requirements With **High Risks**

1. Plan and Conduct Integrated Tests

- **1K.** Unmanageable ITAR constraints – level 2, critical
  - **Mitigation strategy**:
    - Clearly establish requirements
    - Ensure plans, agreements, and procedures are in place and followed
    - Ensure timely identification of affected programs
    - Past performance record

Requirements With **High Risks**

2. Operate AEDC Assets

- 2g. Security constraints – level 5, serious
  - **Mitigation strategy**:
    - Clearly established requirements
    - Establish and evaluate plan for effective personal/electronic access balanced against increasingly heightened threat level
    - Past performance record
- 2h. Catastrophic failures – level 3, critical
  - **Mitigation strategy**:
    - Plan for risk assessment , requirements identification, prioritization, and timely execution

5. Modernize AEDC Assets

- 5b. Test/maintenance schedule conflict – level 4, serious
  - **Mitigation strategy:**
    - Clearly established requirements
    - Process to balance test/maintenance requirements and resolve conflicts
    - Past performance record

- 5d. Loss of external AEDC advocates – level 4, serious (*A Government issue*)
  - **Mitigation strategy**:
    - Evaluate level of "good will"/clout

Requirements With **High Risks**

5 Modernize AEDC Assets

- 5g.Insufficient technical knowledge – level 4, serious
  - **Mitigation strategy**:
    - Clearly established requirements
    - Evaluate plan for capturing existing knowledge and maintaining in future
    - Possible evaluation factor
    - Past performance record

- 5i. Environmental constraints – level 4, serious
  - **Mitigation strategy**:
    - Clearly established requirements
    - Evaluate plan for environmental compliance and anticipation of future changes
    - Past performance record

6. Long Range Planning – Gvt Responsibility

- 6a. Ill-defined requirements – level 4, serious (*A government issue)*
  - **Mitigation strategy**:
    - Concerted effort to define and communicate requirements
    - Documentation and control of requirements

Requirements With **High Risks**

7. Perform Analysis and Evaluation

- 7b. Inadequate customer interest – level 4, serious (a government issue)
  - **Mitigation strategy**:
    - Show value added or abandon

Requirements With **High Risks**

9. Financial Management

- 9g. Workload driven price changes – level 5, serious (*A government issue*)
  - **Mitigation strategy**:
    - Establish, document, and follow a "pricing" model – reach stability
    - Timely establishment of prices
    - Timely communication with customers

17. Significantly Reduce Cost

- 17b. Unwillingness to accept greater risks – level 5, critical (*principally a government issue*)
    - **Mitigation strategy**:
        - Corporate lead discussions and "coaching" on risk taking and management … just *what the Commander has been doing lately*
        - Clearly established goals and objectives – *what are we trying to accomplish, level of importance, and "trade space"* … how far are we willing to go?
        - Clearly established rewards and penalties
- 17f. Lack of AEDC's ability to communicate what, how, and why things are being done today – level 5, critical (govt)
    - **Mitigation strategy**:
        - Concerted effort to describe "AEDC today"
        - Timely and open communications
        - One-on-one Gvt-industry interchange
        - Aggressive release of information and data (exceptions very limited)

17. Significantly Reduce Cost

- 17c. Restrictive government policies, AFIs, OSHA, etc – level 5, serious (a government issue)
  - **Mitigation strategy**:
    - Aggressive challenge of functional policies, if unsuccessful or if penalized in funding process, use ACE org
    - Past performance in efficiently operating in similar environment
  - 17j. Too accommodating regarding test schedules – (energy/other cost drivers – level 5, serious
  - **Mitigation strategy**:
    - Aggressively manage and scrutinize test scheduling
    - Evaluate strategy to track and charge real-time costs

17. Significantly Reduce Cost

- 17e. Lack of understanding of what, how, and why things are being done today – level 4, critical
  - **Mitigation strategy**
    - Timely, and open discussions
    - One-on-one Gvt-industry interchange
    - Aggressive release of information and data (exceptions very limited)
- 17h. Ill-defined products – level 3, critical
  - **Mitigation strategy**
    - Ensure requirements and products are well defined
    - Evaluate Offeror definition of planned products

20. Sustain Uncompromised Customer Trust

- 20a. Inadequate OCI implementation – level 2, critical
  - **Mitigation strategy**:
    - Maintain a restrictive OCI clause
    - Clearly define expectations for a relaxed OCI clause
    - Carefully evaluate planned mitigation and information safeguarding policies and procedures
    - Ensure mitigation plans and safeguards are in place
    - Aggressively manage
    - Evaluate past performance record in similar relationships

22. Seamless Compliant MIS Integration/O&M

- 22a. Incompatibility between AEDC and contractor systems – level 4, critical
  - **Mitigation strategy**:
    - GFE MIS systems
    - Clearly define requirements and expectations
    - Thoroughly evaluate proposed systems – test before acceptance!
    - Past performance record in similar environment
- 22b. Lack of integration between contractors – level 4, serious
  - **Mitigation strategy**:
    - GFE MIS systems
    - Minimize number of contractors
    - Choose one contractor as primary MIS provider
    - Thoroughly evaluate proposed systems – test before acceptance!
    - Past performance of either providing MIS or interfacing with other MIS

22. Seamless Compliant MIS Integration/O&M

- 22c. Ill-defined requirements – level 4, serious
  - **Mitigation strategy**:
    - Clearly define requirements and expectations
    - One-on-one Govt-industry interchange
    - Aggressive collection and release of information and data (exceptions very limited)

24. Implement Enterprise Process Management System (Contractor Must Feed Gvt System

- 24a. Inability to communicate what an EPMS is - level 5, serious
  - **Mitigation strategy**:
    - Clearly establish requirements and expectations
    - Describe AEDC's key processes
    - One-on-one Govt-industry interchange

Requirements With **Moderate Risks**

1. Plan and Conduct Integrated Tests

- 1s. Restrictive work rules – level 4, moderate
  - **Mitigation strategy**:
    - Plan for eliminating or dealing with restrictive rules
    - Past performance record

2. Operate AEDC Assets

- 2n. Aging infrastructure – level 5, moderate
  - **Mitigation strategy**:
    - Plan for maintaining/upgrading … sound requirements
    - Prioritization process identifies order of execution properly balanced with test schedules
- 2p. Changing government policies and requirements – level 5, moderate
  - **Mitigation strategy**:
    - Timely assessment and communication of changes .. reasoned challenges as appropriate
    - Clearly defined response expectations
    - Past performance in similar environment
- 2l. Restrictive work rules – level 4, moderate
  - **Mitigation strategy:**
    - Plan for eliminating or dealing with restrictive rules
    - Measure progress and performance
    - Past performance record

2. Operate AEDC Assets

- 2a. Insufficient technical knowledge – level 3, serious
  - **Mitigation strategy**:
    - Evaluate plan for capturing existing knowledge and maintaining in future – staffing plan
    - Possible evaluation factor
    - Past performance record
- 2j. Lack of qualified government workforce – level 3, serious
  - **Mitigation strategy**:
    - Clearly define government roles and responsibilities
    - Assess current state
    - Develop and maintain requisite staff

2. Operate AEDC Assets

- 2m. Inadequate O&M documentation and procedures – level 3, serious
  - **Mitigation strategy**:
    - Clearly establish requirements and expectations
    - Aggressive collection and release of incumbents' procedures, processes, etc. If developed under contract – release
    - Evaluate plan for providing and upkeep of documentation
    - Past performance record
- 2b. Inadequate configuration management – level 3, moderate
  - **Mitigation strategy**:
    - Clearly establish requirements and expectations
    - Aggressive collection and release of information and data (exceptions very limited)
    - Evaluate plan for providing and upkeep of documentation
    - Past performance record

2. Operate AEDC Assets

- 2o. Inadequate function interface – level 3, moderate
  - **Mitigation strategy:**
    - Clearly define interface requirements
    - Aggressively manage lines of communication
- 2i. Inadequate operational processes – level 3, moderate
  - **Mitigation strategy**:
    - Clearly define requirements and expectations
    - Evaluate processes
    - Past performance record
- 2f. Environmental constraints – level 2, serious
  - **Mitigation strategy**:
    - Clearly define requirements and expectations
    - Evaluate plans and procedures
    - Experienced/qualified leadership
    - Aggressively manage lines of communication
    - Past performance record

3. Maintain AEDC Assets

- 3n. Aging infrastructure – level 5, moderate
  - **Mitigation strategy**:
    - Plan for maintaining/upgrading ... sound requirements
    - Prioritization process identifies order of execution properly balanced with test schedules
- 3l. Restrictive work rules – level 4, moderate
  - **Mitigation strategy**:
    - Plan for eliminating or dealing with restrictive rules
    - Past performance record

3. Maintain AEDC Assets

- 3a. Insufficient technical knowledge – level 3, serious
  - **Mitigation strategy**:
    - Evaluate plan for capturing existing knowledge and maintaining in future – staffing plan
    - Possible evaluation factor
    - Past performance record
- 3g. Security constraints – level 3, serious
  - **Mitigation strategy**:
    - Clearly define requirements and expectations
    - Evaluate plans and procedures
    - Experienced/qualified leadership
    - Aggressively manage lines of communication
    - Past performance record

3. Maintain AEDC Assets

- 3j. Lack of qualified government workforce – level 3, serious
  - **Mitigation strategy**:
    - Clearly define government roles and responsibilities
    - Assess current state
    - Develop and maintain requisite staff
- 3m. Inadequate O&M documentation and processes – level 3, serious
  - **Mitigation strategy:**
    - Clearly establish requirements and expectations
    - Aggressive collection and release of information and data (exceptions very limited)
    - Evaluate plan for providing and upkeep of documentation
    - Past performance record

3. Maintain AEDC Assets

- 3b. Inadequate configuration management – level 3, moderate
  - **Mitigation strategy:**
    - Clearly establish requirements and expectations
    - Aggressive collection and release of information and data (exceptions very limited)
    - Evaluate plan for providing and upkeep of documentation
    - Past performance record
- 3i. Inadequate maintenance processes – level 3, moderate
  - **Mitigation strategy:**
    - Clearly define requirements and expectations
    - Evaluate processes
    - Past performance record

3. Maintain AEDC Assets

- 3c. Insufficient funds – level 2, serious
  - **Mitigation strategy**
    - Well developed requirements and sound prioritization process linked to impacts and desired outcomes
    - Sound programming, planning, and budgeting process
    - Well managed work execution programs
- 3f. Environmental constraints – level 2, serious
  - **Mitigation strategy**
    - Clearly define requirements and expectations
    - Evaluate plans and procedures
    - Experienced/qualified leadership
    - Aggressively manage lines of communication
    - Past performance record

3. Maintain AEDC Assets

- 3h. Creating catastrophic failures – level 1, critical
  - **Mitigation strategy:**
    - Plan for maintaining/upgrading … sound requirements
    - Prioritization process identifies order of execution properly balanced with test schedules
    - Follow disciplined maintenance processes and procedures
    - Past performance record

4. Work Force Management

- 4i. Unable to identify core/staffing competency – level 4, moderate
  - **Mitigation strategy:**
    - Clearly describe requirements
    - Evaluate and approve staffing plan
    - Past performance record
- 4b. Improper skill mix – level 3, serious
  - **Mitigation strategy:**
    - Clearly describe requirements
    - Evaluate and approve staffing plan
    - Past performance record

4. Work Force Management

- 4d. Noncompetitive salaries – level 3, serious
  - **Mitigation strategy:**
    - Ensure full understanding of cost reduction initiatives related to compensation plans
    - Monitor performance and give feedback
- 4g. Inability to attract and retain skilled resources – level 3, serious
  - **Mitigation strategy:**
    - Clearly define requirements and performance expectations
    - Evaluate staffing plan
    - Monitor performance and give feedback
    - Past performance record

4. Work Force Management

- 4c. Loss of corporate memory – level 3, moderate
  - **Mitigation strategy:**
    - Evaluate plan for capturing existing knowledge and maintaining in future – staffing plan
    - Consider special RFP language
- 4e. Unable to adjust work force to workload
  - **Mitigation strategy:**
    - Clearly define workload requirements
    - Clearly define performance expectations
    - Evaluate staffing plan and areas of disconnect
    - Monitor performance and give feedback

4. Work Force Management

- 4f. Ineffective transformation – level 3, moderate
  - **Mitigation strategy:**
    - Clearly define requirements and expectations
    - Evaluate initiative/transformation plans
    - Monitor performance and give feedback
    - Past performance record

5 Modernize AEDC Assets

- 5E Ill-Defined Requirements – Level 4, Moderate
  - **Mitigation Strategy**:
    - Clearly define requirements and expectations
- 5A Insufficient Investments – Level 3, Serious
  - **Mitigation Strategy:**
    - Clearly define requirements and expectations
    - Evaluate initiative/investment plans
    - Monitor performance and give feedback
    - Past performance record

5 Modernize AEDC Assets

- 5C Immature Technical Solutions – Level 3, Serious
  - Mitigation Strategy:
    - Clearly define requirements and expectations
    - Evaluate Plan for Providing Leading Edge Technology
- 5H Inadequate Configuration Management– Level 3, Moderate
  - Mitigation Strategy:
    - Clearly establish requirements and expectations
    - Aggressive collection and release of information and data (exceptions very limited)
    - Evaluate plan for providing and upkeep of documentation
    - Past performance record

5 Modernize AEDC Assets

- 5F Ineffective Planning and Programming – Level 2, Serious
  - Mitigation Strategy:
    - Clearly establish requirements and expectations
    - Past performance record

6 Long Range Planning – Gvt Responsibility

- 6C Transient Leadership – Level 5, Moderate
  - Mitigation Strategy:
- 6D Intransient Leadership – Level 5, Moderate
  - Mitigation Strategy:
- 6B Lack of Innovation – Level 3, Serious
  - Mitigation Strategy:

7 Perform Analysis and Evaluation

- 7A Inadequate Tools– Level 3, Serious
  - Mitigation Strategy:
- 7C Lack of Adequate Skills– Level 3, Serious
  - Mitigation Strategy:

8 Contract Management

- 8C Escalating Fringe Benefit Costs– Level 3, Moderate
  - Mitigation Strategy

9 Financial Management

- 9D Proliferation of Fund Elements – Level 5, Moderate
  - Mitigation Strategy:
- 9B Changing Rules Interpretation– Level 4, Moderate
  - Mitigation Strategy:

9 Financial Management

- 9E Inadequate Financial Analysis– Level 4, Moderate
  - Mitigation Strategy:
- 9F Incompatible Contractor Provided Systems– Level 3, Serious
  - Mitigation Strategy:

10 Market

- 10D Insufficient Understanding of the Market– Level 4, Moderate
  - Mitigation Strategy

12 Environmental, Safety, Health and Quality

- 12B Changing Requirements– Level 4, Moderate
  - Mitigation Strategy
- 12D Regulatory Non-Compliance– Level 2, Serious
  - Mitigation Strategy

16 Improve Efficiency/Productivity

- 16B Ill-Defined Objectives and Measures– Level 4, Moderate
  - Mitigation Strategy
- 16C Constrained by Procedures and Regs– Level 4, Moderate
  - Mitigation Strategy

16 Improve Efficiency/Productivity

- 16E Too Accommodating – Level 4, Moderate
  - Mitigation Strategy
- 16D Excessive Risk Aversion– Level 4, Moderate
  - Mitigation Strategy

17. Significantly Reduce Cost

- 17a. Inability to <u>think</u> out of the box – level 5, moderate
  - **Mitigation strategy:**
    - Corporate lead discussions and "coaching" on risk taking, out-of-the box thinking, and management … *just what the commander has been doing lately*
    - Clearly established goals and objectives – *what are we trying to accomplish, level of importance, and "trade space"* … how far are we willing to go?
- 17d. Restrictive work rules – level 5, moderate
  - **Mitigation strategy:**
    - Plan for eliminating or dealing with restrictive rules
    - Measure progress and performance
    - Past performance record

17. Significantly Reduce Cost

- 17i. Inability to <u>accept</u> out of the box thinking – level 5, moderate
  - **Mitigation strategy**:
    - Corporate lead discussions and "coaching" on risk taking, out-of-the box thinking, and management ... *just what the commander has been doing lately*
    - Clearly established goals and objectives – *what are we trying to accomplish, level of importance, and "trade space"* ... how far are we willing to go?
- 17g. Unwillingness to stop doing things– level 4, moderate
  - **Mitigation strategy**:
    - Corporate lead discussions and "coaching" on risk taking, out-of-the box thinking, and management ... *just what the commander has been doing lately*
    - Clearly established goals and objectives – *what are we trying to accomplish, level of importance, and "trade space"* ... how far are we willing to go?

18 Measure Performance

- 18C Inadequate and Changing Baselines– Level 4, Moderate
  - Mitigation Strategy
- 18A Inadequate Measures of Performance – Level 3, Serious
  - Mitigation Strategy
- 18D Ill-Defined Products – Level 3, Moderate
  - Mitigation Strategy

20 Sustain Uncompromised Customer Trust

- 20C Fluctuating Business Rules – Level 5, Moderate

- 20 B Inadequate Information Assurance – Level 1, Critical
  - Mitigation Strategy:

21 Achieve Customer Intimacy

- 21B Lack of Resources– Level 4, Moderate
  - Mitigation Strategy

Requirements With **Moderate Risks**

23 Advance State of the Art in Test and Analysis

- 23B Lack of Available Skills – Level 3, Serious
  - Mitigation Strategy
- 23A Insufficient Funding to Support the Advancement – Level 3, Moderate
  - Mitigation Strategy

24 Implement Enterprise Process Management System(Contractor Must Feed Gvt System)

- 24B Constantly Changing Government Rqmts
  - Level 4, Moderate
    - Mitigation Strategy
- 24C Lack of Buy-In – Level 4, Moderate
    - Mitigation Strategy
- 24D Unwillingness to Commit the Resources – Level 4, Moderate
    - Mitigation Strategy

26 Integrate all of the Above

- 26E Too Many Interfaces– Level 4, Moderate
  – Mitigation Strategy
- 26F Complex Interface Structure – Level 4, Moderate
  – Mitigation Strategy
- 26B Poorly Defined Interfaces – Level 3, Moderate
  – Mitigation Strategy

26 Integrate all of the Above

- 26A Incompatible Organizational Structure – Level 2, Serious
  - Mitigation Strategy
- 26C Protection of Fiefdoms – Level 2, Serious
  - Mitigation Strategy

Requirements with **Low Risks**

1. Plan and Conduct Integrated Tests

1D Highly Variable Workload
1H Energy Costs Too High
1L Changing Requirements
1N Security Constraints
1R Competition for Test Business
1S Restrictive Work Rules
1M Damage to Propulsion Test Articles
1Y Lack of Competent Government Work Force
1B No Customers for a Specific Test Complex
1C Too Many Customers
1U Insufficient Test Support (PMEL, Model Shop, Utilities)
1P Damage to Aircraft Test Articles
1Q Supply/Logistics Constraints
1W Changing Government Policies and Requirements

Requirements with **Low Risks**

2. Operate AEDC Assets

2D Too Much Work

2E Dynamic Workload

3. Maintain AEDC Assets

3O Inadequate Functional Interface

3D Too Much Work

3P Changing Government Policies and Requirements

3E Dynamic Workload

4. Work Force Management

4A Labor Disputes

4H Closure of UTSI

Requirements with **Low Risks**

5 Modernize AEDC Assets
5K Ineffective Partnerships Cause Wrong Decisions or Missed Opportunities

8 Contract Management
8D Corporate 'Reach In'

8B Lack of Corporate Reach Back

9 Financial Management

9A Funding Instability

10 Market

10A Nebulous Goals

10B Insufficient Funds

10C Insufficient Management Support

Requirements with **Low Risks**

11 Support External Reporting

11B Inability to Meet Short Suspenses

11A Insufficient Experience with Reporting Systems

11C Rapidly Changing Reporting Requirements

12 Environmental, Safety, Health and Quality

12A Insufficient Emphasis

12C Lack of Technical Expertise

13 Physical and Information Security

13C Failure to Comply with External Directives

Requirements with **Low Risks**

14 Property Accountability

14A Lack of Consistent Controls

14B Increased Cost Due to Loss of Government Equipment

16 Improve Efficiency/Productivity

16A Labor Dispute

18 Measure Performance

18B Diverse Non-Standard Operations

19 Manage Energy

19B Lack of Energy Purchasing Expertise

19C Lack of Energy Conservation Expertise

19A Inadequate Scheduling of Operations vs Utility Costs

Requirements with **Low Risks**

21 Achieve Customer Intimacy

21A Failure to Understand Customer's Needs

23 Advance State of the Art in Test and Analysis

23D Inadequate Return on Investment

23C Inadequate Direction from Customers/Business Areas

23E Lack of Tools and Lab Space

25 Public Affairs

25B Lack of Insight into AEDC
25A Lack of Trained Media Personnel

26 Integrate all of the Above

26D Lack of Co-Located Activities

Major Requirements Summary

- Plan and Conduct Integrated Tests

- Operate and Maintain AEDC Assets

- Modernize AEDC Assets

- Provide Mission and General Support Services

- Management

And

Achieve Significant Cost Reduction

Major Requirements Summary

- **Plan and Conduct Integrated Tests**
  - Includes test planning and execution; analysis and evaluation; test technology; and customer relations
- **Operate and Maintain AEDC Assets**
  - Includes all operation, maintenance, and scheduling of test, plant, and base support infrastructure
- **Modernize AEDC Assets**
  - Includes the modernization and upgrade of test, plant, and base support infrastructure. Also includes the support of long range facility planning and technology development
- **Provide Mission and General Support Services**
  - Includes enabling mission support such as utilities, information technology, supply, transportation, purchasing, labs, and machine and fabrication. Also includes general services such as security, environmental, safety, health, quality, and public affairs
- **Management**
  - Includes overall management and integration of contract tasks and business functions including financial, work force, information, property, and performance measurement
- **Achieve Significant Cost Reduction**
  - Includes the comprehensive planning and execution of initiatives to improve efficiency and productivity, streamline operations, and reduce the cost of testing for AEDC's customers

Major Risk Summary

- **Requirements definition and understanding AEDC**
  - Ill defined requirements/outputs ... inadequate understanding of requirements
  - Unable to communicate what and how things are being done
  - Inadequate understanding of what and how things are being done
- **Lack of qualified contractor work force (at <u>all</u> levels)**
  - Insufficient management & technical knowledge
  - Inability to attract and retain skilled people
  - Improper skill mix
- **Non-compliance**
  - Security
  - Environmental
  - OSHA
  - ITAR
  - AFIs,etc

Major Risk Summary (Cont.)

- Inadequate OCI implementation
- Incompatible AEDC and contractor provided management information systems
- Ineffective scheduling
  - Test/Maintenance Conflicts
  - Too accommodating (energy/other cost drivers)
- Resistance to change or unwillingness to explore areas posing higher risks
- Costs grow or reductions don't happen

Where We Go Next

• Validation by Industry – Response during RFI period is highly desired

• Continued Development of Risk Mitigation

• Implement Mitigation thru the RFP and/or Changes in Government Process/Organization

Desired Feedback

- Have we identified the right risks?

- Have we correctly assessed the probability and consequences?

- Suggestions and Comments on Mitigation Strategy

- Will an acquisition strategy based on mitigating these risks result in long-term, affordable, technical excellence?